IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Jurgen Schulz	Art Unit	: 3627
Serial No.	: 10/553,292	Examiner	: Obaid, Fateh M.
Filed	: November 10, 2006	Conf. No.	: 8644
Title	: METHOD AND DEVICE FOR DISTRIBUTING PACKAGES AND OTHER SIMILAR DISPATCHED ARTICLES		

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL

(1) Real Party in Interest

The real party in interest in the above application is Red Parcel Post AG.

(2) Related Appeals and Interferences

The Appellant is not aware of any appeals or interferences related to the above-identified patent application.

(3) Status of Claims

This is an appeal from the decision of the Primary Examiner in an Office Action dated September 17, 2010, rejecting claims 1-23.

The claims of the invention have been rejected three times. Furthermore, a pre-appeal brief was filed and a pre-appeal brief conference was held. The decision of the pre-appeal brief conference was to maintain the application under appeal because there is at least one actual issue for appeal. Claims 1-23 are pending in the application.

No claims are allowed. Claims 1-23 are the subject of this appeal.

(4) Status of Amendments

All amendments have been entered. Appellant filed a Notice of Appeal on March 4, 2011.

(5) Summary of Claimed Subject Matter

Background

The claimed invention relates to a method and a device for distributing packages and other similar dispatched articles. (Specification, Paragraph [0001], Lines 1-2).

In some conventional package distribution methods, packages received in collecting locations are provided with a routing label and transported by long distance transport to receiving depots. Starting at the receiving depots which function as trans-shipment centers, the packages are distributed to transport belts where package codes that are contained in a routing label are detected by means of a manual scanner. The packages are subsequently moved to a delivery vehicle. Using the delivery vehicle, in accordance with the knowledge of the delivery person, a corresponding distribution route is then traveled within a delivery area. In such conventional delivery systems, an optimization in accordance with time and cost criteria is possible only in the area of internal sequences before or within the receiving depot. Furthermore, a tracking action for quality assurance of the distribution requires high expenditure. Thus, direct tracking of an individual package is not possible. (Specification, Paragraph [0002]).

Appellant's Invention

Claim 1

One aspect of the Appellant's invention is set out in claim 1 as a method for distributing packages or similar dispatched articles. Appellant's FIG. 1 shows a block diagram of the method for distributing packages or similar dispatched articles.

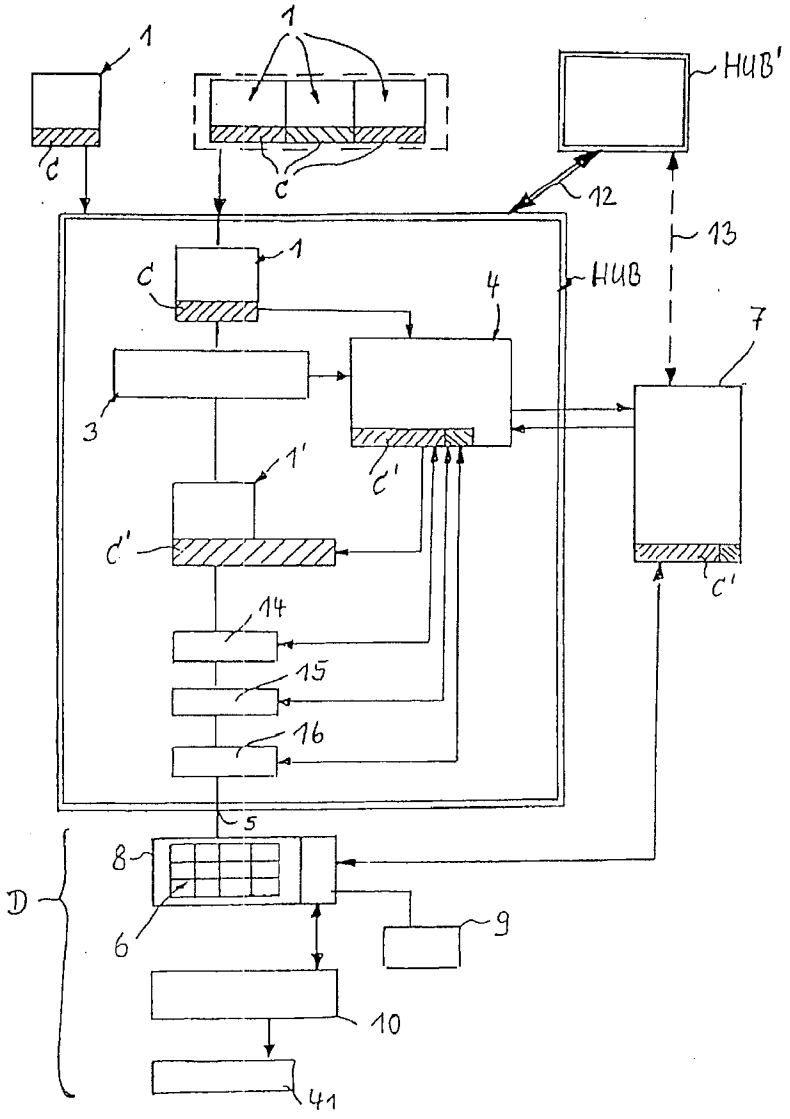

Fig. 1

One inventive feature of Appellant's claim 1 includes acquiring packages (e.g., 1) that are to be transported from private senders and/or commercial senders to an addressee (e.g., 41) at collecting locations (e.g., FIG. 2, element 2).

Another inventive feature of Appellant's claim 1 includes providing the packages (e.g., 1) at the collecting locations (e.g., FIG. 2, element 2) with a package code (e.g., C) containing at least an address and a package number as electronically detectable data (Specification [0021], lines 8-11).

Another inventive feature of the Appellant's claim 1 includes supplying the collected packages (e.g., 1) to a HUB center (e.g., HUB) that is associated with the collecting locations (Specification, [0022], lines 3-5).

Another inventive feature of the Appellant's claim 1 includes combining in the HUB center (e.g., HUB) the package codes (e.g., C) with data sets comprising measurement data (length, width, height, weight), geo coordinates (addressees) and identification data of the packages, respectively, to controllable package routing codes (e.g., C'), respectively (Specification, [0022], lines 6-16).

Another inventive feature of the Appellant's claim 1 includes supplying the package routing codes (e.g., C') of all the packages to a central computer (e.g., 7) arranging the packages (e.g., 1) according to output signals that are generated by a program of the central computer (e.g., 7) and that effect a dynamically optimizable route planning in a sorted package sequence sorted in accordance with distribution zones (Specification, [0024], lines 1-10).

Another inventive feature of the Appellant's claim 1 includes introducing the sorted package sequence and the package routing codes (e.g., C') into transport boxes (e.g., FIG. 2, element 30) in a distribution-compatible sorted arrangements (Specification, [0024], lines 8-12).

Another inventive feature of the Appellant's claim 1 includes transferring the transport boxes onto a vehicle (Specification, [0024], lines 5-12).

Another inventive feature of the Appellant's claim 1 includes delivering automatically controlled the packages (e.g., 1) by a navigation-controlled distribution to the addressee (e.g., 41), respectively (Specification, [0024], lines 13-16).

The configuration of claim 1 is advantageous over conventional package delivery systems because it enables an automatic distribution of packages by means of improved identification codes, resulting in distribution of packages in a shorter amount of time. The improved identification codes are useable by, for example, a computer program for controlling loading of standardized cargo spaces. For example, the codes can be used by the computer program to determine maximum cargo space utilization, maximum carrying

load, minimal transport distances as well as a simple controllable package delivery at reduced cost. (Specification, Paragraph [0003]).

Claim 11

Another aspect of the Appellant's invention is set out in claim 11 as a device for distributing packages (e.g., 1) or similar dispatched articles for performing the method according to claim 1. Appellant's FIG. 1 (reproduced above) shows a block diagram of the device for distributing packages or similar dispatched articles.

An inventive feature of the Appellant's claim 11 is a HUB center (e.g., HUB) and in the area of the HUB center (e.g., HUB) measuring device (e.g., 3) comprising sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates (Specification, Paragraphs [0011], [0022]).
Another inventive feature of the Appellant's claim 11 is a central computer (e.g., 7), wherein measured data measured by the measuring device (e.g., 3) are supplied to the central computer (e.g., 7) correlating the measured data to the packages (e.g., 1) as package routing codes (e.g., C') such that by means of the measured data processed by the central computer (e.g., 7) in the HUB center (e.g., HUB) a control action is effected with which the packages (e.g., 1) are transferable in an ordered sequence into at least one vehicle and the packages (e.g., 1) are distributable by a route planning that is dynamically optimized by the package routing codes (e.g., C') (Specification, Paragraph [0024]).

The configuration of claim 11 is advantageous over conventional package delivery systems for the reasons described above with respect to claim 1.

(6) Grounds of Rejection to be Reviewed on Appeal

Claims 1-23 stand rejected under 35 USC 103(a) as being unpatentable over U.S. patent application 2002/0130065 A1 to *Bloom* in view of U.S. patent 6,601,073 B1 to *Robare*.

(7) Argument

1. The Law
Obviousness

All claim limitations must be considered

"All words in a claim must be considered in judging the patentability of that claim against the prior art." ***In re Wilson***, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. ***In re Fine***, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Completeness of Examiner's Action

"The examiner's action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before further action is made. However, matters of form need not be raised by the examiner until a claim is found allowable." (37 CFR 1.104(b)).

2. Claims 1-23 are patentable over U.S. patent application 2002/0130065 A1 to *Bloom* in view of U.S. patent 6,601,073 B1 to *Robare*.

Of independent claims 1 and 11, the Examiner has addressed only claim 11 contending that "implementing the system of claims 11-19 and 22-23 will necessitate carrying out the steps prescribed in corresponding method claims 1-10 and 20-21. Thus, for purposes of this appeal only, the Appellant will address only the rejection of claim 11 with the understanding that claims 1 and 11 may be treated as standing or falling together.

Independent Claim 11

Claim 11 is directed to a device for distributing packages or similar dispatched articles. The device includes a HUB center and in the area of the HUB center measuring device comprising sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates, respectively. The device further includes a central computer, wherein measured data measured by the measuring device

are supplied to the central computer correlating the measured data to the packages as package routing codes such that by means of the measured data processed by the central computer in the HUB center a control action is effected with which the packages are transferable in an ordered sequence into at least one vehicle and the packages are distributable by a route planning that is dynamically optimized by the package routing codes.

In the non-final office action of 3/31/2010, the Examiner contends that *Bloom* discloses a device for distributing packages or similar dispatched articles for performing the method according to claim 1. (*Non-Final Action*, Pages 2-3).

The Examiner acknowledges that *Bloom* alone fails to disclose "...sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates, respectively" but argues that *Robare*, interpreted broadly, discloses this feature. The Examiner then contends that it would have been obvious to modify *Bloom* to include *Robare's* sensors to provide the advantage of faster sorting and distribution of the items to the destination. (*Non-Final Action*, Page 3). This rejection has been maintained throughout the course of the prosecution of this application.

The Examiner has clearly erred in rejecting claim 11 under 35 USC 103(a) as being unpatentable over *Bloom* in view of *Robare*.

Bloom in View of _Robare_ Fails to Teach All the Claimed Limitations

Simply put, neither *Bloom* nor *Robare* disclose "...sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates, respectively" as is recited in claim 11.

Bloom discloses a method and system for "efficient bulk package delivery for recipients." (*Bloom*, Abstract). The method involves retailers or manufacturers fulfilling orders in bulk and shipping the bulk orders to a nearby regional distribution center (RDC). At the nearby RDC, the bulk orders are sorted into separate bulk shipments

based on their destination. The sorted bulk shipments are shipped to their respective destination RDCs where they are sorted and distributed to recipients.

Robare discloses "a database architecture for using geographic data to provide navigation related functions." (*Robare*, Abstract). This involves a data access layer that accepts requests from navigation program applications and accesses the database to fulfill the requests.

The Appellant submits that neither *Bloom* nor *Robare* separately or in combination discloses "sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates, respectively," as recited in independent claim 11.

Rather, the Appellant contends that *Robare* discloses a navigation system, including a sensor (*Robare*, FIG. 1, Element 25) suitable to "...measure the speed, direction, angular acceleration, and so on, of the vehicle." (*Robare*, Column 3, lines 57). *Robare's* sensors, however, do not provide the data recited in claim 11 as discussed above. Therefore, even if one skilled in the art was to modify *Bloom's* system and method to include *Robare's* sensor (which we do not concede), that person would not have arrived at the invention as recited in claim 11.

In the final office action of 9/17/2010, with respect to the invention recited in independent claim 11, the Examiner characterized the Appellant's **Argument A** as:

> "*This fails to disclose sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates, respectively.*" (*Final Action,* Page 6, line 15).

The Examiner reminded the Appellant "that claims must be given their broadest reasonable interpretation" and contended that *Robare* discloses the features presented in **Argument A** as:

> "**Each of these locations 116 has a unique physical location (latitude, longitude, and optionally absolute or relative altitude) and each of the locations 116 can be uniquely**

identified by its two dimensional (or three dimensional) geographic coordinates (i.e., latitude, longitude, and optionally altitude). " (Emphasis added by the Examiner.) (*Robare,* FIGs. 5-6, Column 8 Lines 35-67).

The Appellant believes that the Examiner is using the cited section to equate *Robare's* sensor which identifies three dimensional geographic coordinates to the "sensor units for detecting ... package sizes (length, width, height, weight)" recited in independent claim 11.

Based on this belief, we disagree with the Examiner's objection to **Argument A**. We submit that even given the broadest reasonable interpretation of claim 11, Figs. 5-6 and col. 8 lines 35-67 of *Robare* do not disclose sensor units for detecting "package sizes (length, width, height, weight)" as recited in independent claim 11.

Rather, the cited section of *Robare* discloses identification of geographic coordinates that represent a point in three dimensional space. Such a general teaching of identifying points in three dimensional space is not equivalent to "sensor units for detecting ... package sizes (length, width, height, weight)." For example, sensing a package's three dimensional geographic location (e.g., Latitude: 42.3583333, Longitude: -71.0602778, Altitude: 9 ft) does not in any way provide or suggest a package's size (e.g., 2 ft long, 3 ft wide, 1 ft high, and weighing 25 lbs).

For these reasons, the Appellant submits that the Examiner's rejection is not proper because the assertion that *Robare* discloses "sensor units for detecting ... package sizes (length, width, height, weight)" is factually deficient.

Furthermore, the Examiner has clearly erred in rejecting dependent claim 10 under 35 USC 103(a) as being unpatentable over *Bloom* in view of *Robare*.

The Examiner's Action is Not Complete as to All Matters

Regarding claims 1-10 and 22-23, the Examiner stated in the final office action that "all limitations as recited have been analyzed and rejected with respect to claims 11-

19 and 22-23. Claims 1-10 and 20-21 pertain to a method corresponding to the system of claims 11-19 and 22-23." (*Final Action*, Page 6, line 3).

However, the Appellant cannot find a system claim that corresponds to method claim 10. Therefore, the Appellant disagrees with the rejection of dependent claim 10 for the reason that it hasn't been properly examined.

In the rejection of dependent claim 15, the Examiner contends that *Bloom* discloses "wherein as a support device for sorted package stacks a transport box having standardized dimensions is provided" as recited in claim 15 with the following:

> *"The labeled cases filled with ordered items can be stacked tightly on the retailer's shipping dock conveyor in a manner similar to how boxes would be stacked on pallets. ... The cases can be stacked to make use of space as efficiently as possible without extending beyond the edges of the dock conveyor. ..."* (*Bloom*, Paragraph 82).

The Appellant submits that *Bloom* does not disclose "a support device for sorted package stacks a **transport box having standardized dimensions is provided**." Instead, *Bloom* discloses the stacking of cases "to make use of space as efficiently as possible" and "in a manner similar to how boxes would be stacked on pallets." This is clearly different than providing "a transport box having standardized dimensions" as is required by dependent claim 15.

In view of the foregoing clear factual deficiencies in the rejection, the Appellant requests reversal of the section 103 rejection of all claims.

Conclusion

The appeal brief fee in the amount of $270 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply all charges or credits to Deposit Account No. 50-4189, referencing Attorney Docket No. 4A005-002US1.

Respectfully submitted,

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Frank R. Occhiuti
Reg. No. 35,306

Customer No. 69713
Occhiuti Rohlicek & Tsao LLP
10 Fawcett Street
Cambridge, MA 02138
Telephone: (617) 500-2501
Facsimile: (617) 500-2499

(8) Claims Appendix

1. (Original) A method for distributing packages or similar dispatched articles, the method comprising the steps of:

acquiring packages that are to be transported from private senders and/or commercial senders to an addressee at collecting locations;

providing the packages at the collecting locations with a package code containing at least an address and a package number as electronically detectable data;

supplying the collected packages to a HUB center that is associated with the collecting locations

combining in the HUB center the package codes with data sets comprising measurement data (length, width, height, weight), geo coordinates (addressees) and identification data of the packages, respectively, to controllable package routing codes, respectively;

supplying the package routing codes of all the packages to a central computer arranging the packages according to output signals that are generated by a program of the central computer and that effect a dynamically optimizable route planning in a sorted package sequence sorted in accordance with distribution zones;

introducing the sorted package sequence and the package routing codes into transport boxes in a distribution-compatible sorted arrangements;

transferring the transport boxes onto a vehicle;

delivering automatically controlled the packages by a navigation-controlled distribution to the addressee, respectively.

2. (Original) The method according to claim 1, wherein the data sets comprising the measurement data, geo coordinates, and identification data are acquired already at the collecting locations, at a client, or directly at the sender, are transmitted to the central computer, and, subsequently, the data sets are checked when the packages arrive in the HUB center.

3. (Original) The method according to claim 1, wherein several of the HUB center are controlled by the central computer.

4. (Original) The method according to claim 1, further comprising the step of supplying the packages in the HUB center by computer control to an intermediate storage facility having defined storage locations, storing the packages in the intermediate storage facility within a predetermined time window, and, subsequently, removing the packages in a distribution-compatible sequence.

5. (Original) The method according to claim 1, wherein in each of the collecting locations that are decentralized, the packages are provided with a machine-readable information carrier,

the respective package code is electronically acquired as identification information and supplied to the central computer,

the packages of the collecting locations are transported in a transport box to a common trans-shipment center,

from the trans-shipment center, the packages as a random transport quantity are transported in the transport box to the HUB center, in the HUB center, the package codes are read into a HUB computer for checking completeness of the packages,

the package routing codes are generated from the package codes and the data sets as an electronically checked package routing code, respectively,

the package routing codes are supplied to the central computer and processed in accordance with the dynamically optimizable route planning, computed data of the dynamically optimizable route planning are transmitted to the HUB computer and to the trans-shipment centers contained within the dynamically optimizable route planning,

the packages are arranged in package stacks in a transport-compatible way in a last-in-first-out arrangement,

one or several of the generated package stacks are removed from the HUB center,

the package stacks are introduced into transport boxes and are transported by a transport vehicle to the trans-shipment center, in the trans-shipment center the package stacks are transferred to a distribution vehicle,

the distribution vehicle receives the package routing codes of one or several package stacks contained in the transport boxes from the central computer, subsequently, by means of a distribution route that is controlled by a navigation system, the packages are delivered to the addressee with the optimized route planning, and

the package routing codes are compared with test data.

6. (Original)The method according to claim 1, wherein the dynamically optimized route planning is performed by the central computer in a time window that enables delivery of the packages on a day following the day of acquiring the packages.

7. (Original) The method according to claim 1, the collecting locations are the addresses of the senders and the packages are picked up by a pickup service and are provided by the pickup service with an information carrier receiving the packaging codes.

8. (Original) The method according to claim 1, wherein the packages are supplied from the collecting locations directly to the HUB center.

9. (Original) The method according to claim 1, wherein the central computers is provided with programs into which a complete address list, postal codes to be correlated therewith, and actual geo coordinates are entered.

10. (Original) The method according to claim 1, wherein with the programs of the central computer respective limit ranges of the package dimensions, a maximum number of packages that can be delivered in a package stack or in the transport box, and a time window for package delivery can be predetermined.

11. (Original) A device for distributing packages or similar dispatched articles for performing the method according to claim 1, the device comprising:

a HUB center and in the area of the HUB center measuring device comprising sensor units for detecting identification data, package sizes (length, width, height, weight), addresses and geo coordinates, respectively;

a central computer, wherein measured data measured by the measuring device are supplied to the central computer correlating the measured data to the packages as package routing codes such that by means of the measured data processed by the central computer in the HUB center a control action is effected with which the packages are transferable in an ordered sequence into at least one vehicle and the packages are distributable by a route planning that is dynamically optimized by the package routing codes.

12. (Original) The device according to claim 11, wherein, for detecting and identifying the packages by package codes, a transponder as an information carrier is secured on the packages, wherein data of the transponder are acquired in the area of the HUB center that is configured as a sorting location and has a HUB computer with a stored-program control unit connected to the central computer, which HUB computer for handling the packages interacts respectively with sensor devices, controlled storage devices, packing devices, and distribution systems on the basis of the geo coordinates.

13. (Original) The device according to claim 12, wherein the sensor units are arranged in the HUB center in the area of an arrival conveying stretch and individually measure the packages, wherein comparing and measuring results of the sensor units are transmitted in the form of the package routing codes to the transponder forming the information carrier and to the HUB computer.

14. (Original) The device according to claim 11, wherein the HUB center in the area of an exit conveying stretch is provided with a packing device and a support device receiving package stacks contained in a transport box.

15. (Original) The device according to claim 11, wherein as a support device for sorted package stacks a transport box having standardized dimensions is provided.

16. (Original) The device according to claim 11, wherein selected packages in the area upstream of a packing device pass through a transport system that distributes the packages in a targeted way for transfer into transport boxes.

17. (Original) The device according to claim 11, wherein the package routing codes generated in the central computer for a transport box, respectively, are transmitted wireless or by a data storage medium onto a terminal device provided in a distribution vehicle.

18. (Original) The device according to claim 17, wherein a navigation system or auxiliary devices with an application for geo coordinates that is integrated into the distribution vehicle are connectable to the terminal device.

19. (Original) The device according to claim 17, wherein the terminal device has an input part that acknowledges the delivery of the package.

20. (Previously Presented) The method according to claim 1, wherein at least one of the steps of: combining the package codes, supplying the package routing codes, or introducing the sorted package sequence and the package routing codes occurs on a predetermined periodic basis.

21. (Previously Presented) The method according to claim 20, wherein the period of the predetermined periodic basis is daily.

22. (Previously Presented) The device according to claim 11, wherein the control action is performed on a predetermined periodic basis.

23. (Previously Presented) The device according to claim 22, wherein the period of the predetermined periodic basis is daily.

(9) Evidence Appendix

None.

(10) Related Proceedings Appendix

None.